OSM Hackfest – Session 10
How to develop in OSM

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Main Resources
Resources in the Wiki

- Development Guidelines
  https://osm.etsi.org/wikipub/index.php/Workflow_with_OSM_tools
- Developer HowTo
  https://osm.etsi.org/wikipub/index.php/Developer_HowTo
- Developer HowTo for RO
  https://osm.etsi.org/wikipub/index.php/Developer_HowTo_for_RO_Module
- How to upgrade components
  https://osm.etsi.org/wikipub/index.php/How_to_upgrade_the_OSM_Platform
Other places you should visit

- Gitweb
  https://osm.etsi.org/gitweb/
- Gerrit
  https://osm.etsi.org/gerrit/
- Bugzilla
  https://osm.etsi.org/bugzilla/
I need help with OSM. What should I do?

- Search the wiki
  
  https://osm.etsi.org/wikipub/index.php/Main_Page

- Ask in OSM Slack Workspace
  
  https://join.slack.com/t/opensourcemanono/shared_invite/enQtMzQ3MzYzNTQ0NDIyLWJkMzRjNDM0MjFjODYzMGQ3ODIzMzJIINTg2ZGI5OTdiZjFiNDMyMzYxMjRjNDU4N2FmNjRjNzY5NTE1MjgzOTQ

- Send an email to the mailing list
  
  OSM_TECH@list.etsi.org
I would like to present something new

- TECH Call (every Thursday at 4PM CET) - General topics
- Service Assurance Call (every other Wednesday at 4PM CET) - Monitoring topics
- DevOps Call (every other Wednesday at 4PM CET) – DevOps Pipeline topics
- MARCOM Call (every other Wednesday at 4PM CET) - Marketing OSM

**NOTE:** DevOps and MARCOM coincide

- Send an email to the mailing list
  
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There are multiple ways to contribute

- Writing code
- Writing tests
- Writing documentation
- Helping in Devops
- Helping the MARCOM team
- Creating a PoC
I want to contribute code

- To contribute code, tests and documentation to the OSM community you need an ETSI OSM account
  https://osm.etsi.org/about/how-to-join

- As an organization:
  - ETSI Member
  - OSM Participant

- As an individual developer
  https://osm.etsi.org/register
Contribution workflow

1. Clone the repository
   ```
   git clone https://osm.etsi.org/gerrit/osm/NBI.git
   ```

2. Install the commit-msg hook
   ```
   ```

3. Make the hook executable
   ```
   chmod u+x NBI/.git/hooks/commit-msg
   ```

4. Make your changes
5. Add an Apache 2 license header for your new files

6. Check your changes
   git diff

7. Add all the files that are necessary for your contribution
   git add <path_of_file>

7. Commit your changes
   git commit -s -m “Relevant message in the context of the commit”

8. Push your changes upstream
   git push origin HEAD:refs/for/master
CI/CD Pipeline

Stage 1: Trigger per-module pipelines
Stage 2: Scan, UTest, Build, Archive
Stage 3: System Install
Stage 4: System Tests, Smoke Tests

OSM Release Server
VNF
NFVI & VIM

Code Commit

Artifact Storage
Gerrit and the MDLs

Wait for the MDL to review your commit.

It might yield, one of two outcomes:

1) The code is OK and you get +2 in the Code-Review
2) The code is not OK and you get -2 in the Code-Review

For case 2), fix the error and push it again and again until the MDL think the code is OK.
Contribute with a Feature Request

To submit a new feature for OSM you need to create a Feature Request

- Check open Features:
  Go to https://osm.etsi.org/gerrit and search for “project:osm/Features status:Open”

- Feature Requests are written using Markdown format and use the following template
New Feature Contribution via Gerrit

1. Go to [http://osm.etsi.org/gerrit](http://osm.etsi.org/gerrit) and click on Projects > List > osm/Features

2. Click on “Create change”

3. Write the branch “master”, put a title and a description and click on “Create”

4. Click on “Edit” and then “Add” to indicate a name for your file
   **Important**: The file must be located in the root folder of the repo
New Feature Contribution via Gerrit (II)

5. Click “Open” to open an online editor and paste your feature text there.

6. “Save” the changes and “Done Editing”.

7. Finally “Publish Edit” to push it to the staging area. Now your feature is available for review.

8. Inform the OSM TECH community of the new feature by sending the link to OSM_TECH@list.etsi.org and request feedback & TSC review.
Extra resources
Remote debugging dockers

The End